

WORK PLAN
FOR
WORK ASSIGNMENT NO. 0-324
DEL FASCO FORGE SITE – GRAND PRAIRIE, TX
May 15, 2008

**WORK PLAN
DEL FASCO FORGE SITE – GRAND PRAIRIE, TX**

**Prepared for
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA)/
ENVIRONMENTAL RESPONSE TEAM (ERT)**

**Date: May 15, 2008
Contract No: EP-C-04-032
Assignment No.: 0-324**

Approval:

REAC Task Leader

John Bradstreet for IW Date: 5-16-08

**REAC Section Leader
(Cost Model Review)**

John Bradstreet Date: 5-16-08

REAC Program Manager

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Work Assignment Number:	0-324
Work Assignment Title:	Del Fasco Forge Site – Grand Prairie, TX
Work Assignment Manager:	David B. Mickunas
Lockheed Martin REAC Task Leader:	John Wood
Duration:	April 22, 2008 through May 31, 2009
Contract Number	EP-C-04-032
Site ID:	

INTRODUCTION

Purpose. Under this work assignment (WA) Response Engineering and Analytical Contract (REAC) personnel will assist the Environmental Protection Agency/Environmental Response Team (EPA/ERT) Region VI with a vapor intrusion study to be conducted adjacent to the Del Fasco Forge Site in Grand Prairie, Texas (TX). The vapor intrusion study will assist in determining if a subsurface gas plume exists and determine if there is indoor impact associated with the subsurface plume.

Background. The Del Fasco Forge Site is a property in Grand Prairie, TX, which has contaminated soils and groundwater. The Del Fasco Forge manufacturing facility specialized in contract metal fabrication and forging. Trichloroethene (TCE) and other solvents were used as a degreaser on metal products. These chemical solvents and substances were spilled onto the ground and surface areas at the facility. Subsequently these solvents leached into the groundwater and contaminated it. The groundwater flows from the Site to the northeast. Groundwater monitoring has been conducted and the results show that the groundwater in the adjacent community is contaminated.

Assumptions. The following assumptions are understood to apply to this WA:

- The Work Assignment Manager (WAM) will provide guidance on where to monitor for the pollutants of concern.
- Air quality samples collected in TEDLAR[®] bags will be analyzed for tetrachloroethene (PCE), TCE, cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene, 1,1-dichloroethene, and monochloroethene (vinyl chloride) (VCL) using a GC/MS in the Trace Atmospheric Gas Analyzer (TAGA) Mobile Laboratory.
- After completion of Tedlar bag analysis, five units will be selected by the WAM for removal of anthropogenic sources of VOCs and be subsequently monitored for PCE, TCE and DCE by a TAGA Mobile Laboratory. Once the TAGA monitoring demonstrates that lifestyle sources have been removed, SUMMA[®] canisters will be placed in multiple locations in each of the units to collect 24-hour ambient air samples.
- During the 24-hour sampling period, subsurface gas will be collected at all subject units.
- The WAM will also designate ambient air monitoring locations for 24-hour background sample collection.
- Air quality samples collected in SUMMA[®] canisters will be analyzed for tetrachloroethene PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, and VCL using EPA Method TO-15 at an outside laboratory to be determined.

- Deliverables and other project information will be submitted in electronic format to the appropriate ERT-Information Management System (IMS) website. Such delivery will be considered delivery to the WAM as of the time and date such deliverables are received on the website.

TECHNICAL APPROACH

The response will be divided into xxx major tasks as described below:

Task 1: The REAC team will prepare for the field activities, mobilize to the Site and return at the completion of the field activities.

Task 2: Install Sub-surface Probes. Once the team arrives on site, sub-surface probes will be installed by REAC personnel in or under up to 20-units selected by the WAM. It is understood that some of the units will be on slabs, and some of the units will be over crawl-spaces.

Task 3: Collect and Analyze Tedlar Bag Samples of Soil Gas by GC/MS. Soil gas samples will be collected in Tedlar bags from the probes installed under Task 1. Those samples will be analyzed on-site for tetrachloroethene, PCE, TCE, DCE, [1,1-, cis-1,2-, and trans-1,2-DCE], and VCL using the GC/MS on the TAGA mobile Laboratory. Based on those results, the WAM will select five units for further evaluation.

Task 4: Prepare up to Five Selected Units for Further Evaluation. REAC team members will inspect up to five units selected by the WAM for further evaluation and will remove items and containers that may comprise sources of the target substances or other vapors. During the same time, floor plan diagrams of the interiors of the units will be prepared.

Task 5: Conduct Indoor Air Monitoring using the TAGA MS/MS. REAC team members will conduct real time indoor air monitoring of up to five units selected by the WAM for further evaluation. A TAGA Mobile Laboratory will be used to monitor PCE, TCE and DCE in a plurality of rooms selected by the WAM, noting the location of each monitoring position with letter flags on the unit floor plan diagrams.

Task 6: Collect SUMMA Canister Samples of Soil Gas. Using SUMMA[®] canisters certified to 0.070 ppbv, REAC personnel will collect 24-hour samples from up to 20 probes installed in Task 1. The samples will be collected in accordance with the ERT/REAC Standard Operating Procedure (SOP) #1704, *SUMMA Canister Sampling*, and shipped to the selected laboratory for analysis in accordance with EPA Method TO-15.

Task 7: Collect SUMMA Canister Samples of Ambient and Indoor Air. Using SUMMA[®] canisters certified to 0.070 ppbv, REAC personnel will collect 24-hour samples from up to five buildings and/or locations selected by the WAM. The samples will be collected in accordance with the ERT/REAC Standard Operating Procedure (SOP) #1704, *SUMMA Canister Sampling*, and shipped to the selected laboratory for analysis in accordance with EPA Method TO-15.

Task 7: Obtain Ambient Meteorological Conditions (Wind Speed, Wind Direction, Temperature and Relative Humidity). Meteorological data will be collected throughout the on-site monitoring event. The meteorological data will be obtained from a meteorological station from the nearest available airport or air field.

Quality Assurance Project Plan. Project management, measurement, assessment and usability elements applicable to this WA are included in the corresponding site-specific quality assurance project plan (QAPP).

Standard Operating Procedures: Any procedural SOPs and administrative procedures (APs) relevant to this WA are included in the site-specific QAPP. The following REAC SOPs are applicable to site health and safety:

- SOP # 3001, *REAC Health and Safety Program Policy and Implementation*
- SOP # 3003, *REAC Health and Safety Communication Program*
- SOP # 3004, *REAC Medical Monitoring Program*
- SOP # 3005, *Hazard Communication Program*
- SOP # 3007, *Reporting Systems*
- SOP # 3009, *Automotive Safety*
- SOP # 3010, *REAC Personal Safety/Protective Equipment*
- SOP # 3011, *REAC Respiratory Protection Program*
- SOP # 3016, *Personal Protective Equipment Program*
- SOP # 3020, *Inclement Weather, Heat Stress and Cold Stress*

STAFFING PLAN AND SCHEDULE

Staffing Plan. The REAC Task Leader (TL) will maintain contact with the WAM to provide information on the technical and financial progress for the project. This communication will commence with the issuance of the WA. Activities will be summarized in appropriate format for inclusion in REAC Monthly Reports.

The WA for this project was received on April 22, 2007. The WP was initiated within 30 days after receiving the WA. The project is expected to be completed by May 31, 2009.

The REAC TL/Quality Control (QC) Coordinator is the primary REAC point of contact with the WAM. The TL is responsible for the development and completion of the WP and QAPP, project team organization and supervision of all project tasks, including reports and deliverables. The TL will also be responsible for ensuring field adherence to the WP and QAPP, and recording any deviations on a Work Assignment Field Change Form.

The REAC Quality Assurance Officer (QAO), the Health and Safety Officer, Analytical Section Leader, and the Air Response Section Leader are responsible for auditing and guiding the project team, reviewing/auditing the deliverables, and proposing corrective action, if necessary, and for nonconformity to the WP, QAPP or Health and Safety Plan (HASP).

Personnel. The following REAC personnel will be assigned to this WA to perform the indicated responsibilities:

<u>Personnel</u>	<u>Responsibilities</u>	<u>Responsibility Level</u>
Task Leader/MS/MS Operator	Schedule, coordinate and monitors WA activities Responsible for TAGA monitoring and calibration, Report preparation	P4

GC/MS Operator	Responsible for GC/MS calibration and analysis of Tedlar bags, and report preparation.	P3
Data Management Operator	Responsible for TAGA data reduction and report preparation.	P3
Driver	CDL driver to operate the TAGA mobile laboratory, and do maintenance, install sub-slab probes, produce floor plans, and conduct indoor air monitoring.	P3/P2/T3
REAC Field Staff	Conduct SUMMA [®] Sampling, Tedlar bag sampling and site documentation	P2
REAC Staff	TAGA data reduction and prepare draft report sections	P4/P3
Task Leader, Group Leader, Section Leader	Document Review	P4
QAO	WP and QAPP Review/Validation Oversight	P4
QA/QC Chemists	Data Validation/Report Writing	P4/P3

Other REAC technical and/or administrative personnel and subcontractors may work on this project as needed.

Schedule of Activities. The schedule of site related activities is as follows:

- WP 15 May 2008
- Draft QAPP 15 May 2008
- Final QAPP 30 May 2008
- Mobilize to Texas 18 May 2008
- Perform On-Site TAGA Monitoring 19 - 23 May 2008
- Demobilize TAGA from the site 24 May 2008
- Demobilize Remainder of Team 23 May 2008
- Final Analytical TAGA Report 23 July 2008
- Final Analytical Report 2 weeks after receipt of final analytical data

All project deliverable and task dates are estimates based on the information available at the time of WP completion. New information, additional tasks, and events outside REAC control may result in revisions to these dates.

Training and Conference/Seminar/Meeting Attendance: In the course of performing the above tasks, REAC personnel may attend training offered by the EPA such as safety training, training for procedural changes made by the EPA or training offered by outside vendors of specific equipment or instrumentation. Specific training instruction will be authorized by the Project Officer and approved by

the Contracting Officer. As authorized by the Project Officer and approved by the Contracting Officer, REAC personnel may attend a technical conference, meeting, or seminar to perform or support this WA. For the EPA/ERT to successfully fulfill their mission to share and disseminate scientific information, REAC chemists will provide technical support to prepare (and present as necessary) technical papers/posters at a scientific meetings or conferences.

LEVEL OF EFFORT AND COST PROJECTIONS

The estimated cost, including labor, travel, materials, and equipment, to complete this WA are provided in the attached cost summary sheet. While not specifically identified, activities such as photo documentation, computer and graphical support, statistics report preparation and purchasing support may be required to accomplish WA objectives. Labor hours for these activities are included in the cost estimate.

The following trips will be made in support of this WA:

Number of trips	1
Number of days (total)	4
Number of personnel per trip	4

Vendor Services. Up to eight SUMMA samples will be analyzed for VOCs at an outside laboratory for an estimated cost of \$16,000.